

A1  
measuring sample presence in said second chamber by detecting said labeled sample in said second chamber without substantially detecting said labeled sample in said first chamber.

A2  
23. (Amended) A non-destructive [sample] assay comprising:  
measuring [sample] migration of a labeled sample across a permeable detection-blocking membrane.

A3  
30. (Amended) An assay for detecting the presence of a material which has traversed a porous membrane comprising measuring or detecting the presence of said [material] labeled sample which has migrated across said porous membrane wherein said membrane substantially prevents the detection and/or measurement of [any] said [material] sample which has not migrated across said membrane, and wherein said assay is non-destructive of said [material] labeled.

Please cancel claims 31-37.

Please add the following new claims:

A4  
38. An assay that is non-destructive of a cell or organism sample being detected comprising the steps of:  
labeling said sample;  
placing said labeled sample in a first chamber;  
separating said first chamber from said second chamber with a sample permeable, detection-blocking membrane;  
placing an agent in said second chamber to induce migration of said labeled sample across said membrane; and  
measuring sample presence in said second chamber by detecting said labeled sample in said second chamber without substantially detecting said labeled sample in said first chamber.

39. An assay of claim 17 wherein said [inducing] placing step further includes:  
placing a chemical agent in said second chamber capable of creating a chemotactic  
reaction with said labeled sample.

40. An assay of claim 18 wherein said labeling step includes:  
labeling said cells with a dye.

41. An assay of claim 20 wherein said measuring step includes:  
measuring radiation emitted by said labeled cells in said second chamber without  
substantially measuring radiation emitted by said labeled cells in said first chamber.

42. An assay of claim 21 wherein said dye is a fluorinated dye and wherein said inducing  
step includes:

stimulating said labeled cells in said second chamber with electromagnetic radiation of a  
first wavelength whereby said labeled cells emit electromagnetic radiation of a second wavelength;  
and

measuring said electromagnetic radiation of said second wavelength from said cells in said  
second chamber wherein said detection-blocking membrane is a radiation opaque member which  
is not substantially transmissive to at least one of said first and second wavelength of  
electromagnetic radiation.

43. A non-destructive assay comprising:  
inducing migration of a cell or organism sample across a permeable detection-blocking  
membrane; and  
measuring said cell or organism sample migration across said permeable detection-  
blocking membrane.

44. A non-destructive sample assay of claim 24 wherein said inducing step includes:  
providing a chemotactic agent on one side of said membrane.